Investment Office Roadmap

Organization Systems & Controls

Quarterly Target Operating Model
Status Report

Janine Guillot, COIO

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Roadmap Objectives

- The 2011-12 Roadmap consists of six strategic priorities:
 - Organization Systems and Controls

Today's Focus

 Organization Systems and Controls Objective: Design, develop and implement a robust, integrated operating model that minimizes complexity, improves transparency, and strengthens processes, systems, governance & controls

| Organization, Systems & Controls Today (FROM) | (TO) Vision |
|--|---|
| Risk exposure due to inefficient legacy, asset-based "cottage industry" approach geared toward specialized, siloed investment strategies | Efficient, scalable, best-of-breed operating model with clear understanding of controls and risks |
| Fragmented & incomplete data & infrastructure; impossible to aggregate information for timely investment management & decision making | Integrated data & systems for efficient, timely decision making driving superior investment performance |
| Unnecessary complexity for the value derived | Appropriate blend of simplicity & complexity |
| Obscured accountability and unclear roles | Transparent organization structure, roles & processes for clear accountability |



INVO Hot Spots - Key Focus Areas

Target Operating Model

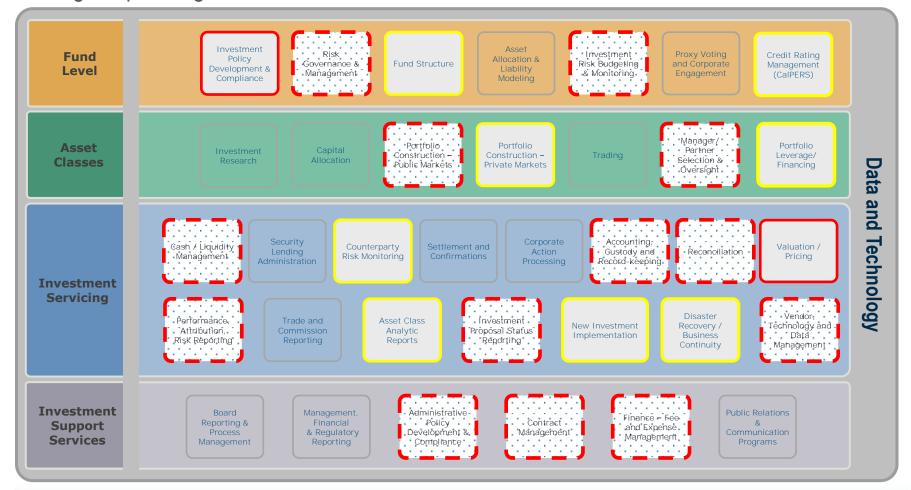
Key

Red – High Priority , Near Term Initiatives (2011)

Yellow - Medium Priority Initiative

Others - Business as Usual or Low Priority

Patterned & Dash Border - Active Work in Progress



Roadmap – Major Initiatives: Sequence and Status

| Initiative | Initiative Status 2011 | | | | 2012 | | | | 2013 | | | | |
|--|---------------------------|---|---|---|------|---|--|--|------|--|--|--|--|
| PM2: "Public Markets Portfolio Management" (formerly IEPC) | | | | | | | | | | | | | |
| Custody, Fund Accounting & Performance | G | | | | | | | | | | | | |
| Investment Risk Management | G | | | | | | | | | | | | |
| Contract & Vendor Management | G | | | | | | | | | | | | |
| Administrative Policies & Monitoring | G | | | | | | | | | | | | |
| Manager Selection & Monitoring | Α | | | | | | | | | | | | |
| Finance / Expense Management | R | | | | | | | | | | | | |
| Operating Risk Governance & Management | G | | | | | | | | | | | | |
| Fund Structure & Fund Expenses | Α | | | | | | | | | | | | |
| Private Assets IBOR & Accounting | N/A | | | | | | | | | | | | |
| Records Retention & Document Management | N/A | | | | | | | | | | | | |
| Investment Policy Development & Monitoring | N/A | | | | | | | | | | | | |
| Cash / Liquidity Management | N/A | * | * | * | | | | | | | | | |
| Technology Management | N/A | * | * | * | | | | | | | | | |
| Pricing / Valuation | N/A | * | • | * | * | * | | | | | | | |
| Data Services (Governance) | N/A | | * | * | • | | | | | | | | |
| Performance Attribution | N/A | * | * | * | * | | | | | | | | |
| Public Records Request Procedures | N/A | | | | | | | | | | | | |
| CRM - Salesforce Expansion | N/A | | | | | | | | | | | | |



Significant Status or Sequence Changes Since Last Report:

Operating Committee Reviewed and Recommended the following sequence and expected timelines changes:

PM² Public Markets Portfolio Management

Added six months to project timeline due to need for further analysis to identify solution; previously proposed vendor solution will not
meet needs on expected timeline

Finance / Expense Management

· After completion of requirements and current process analysis, added six months to timeline to better reflect size of effort

Private Assets IBOR & Accounting

• Move up priority to align with AIM strategic plan;

Records Retention & Document Management

• Move up priority because project is a dependency for a more efficient Public Records Act process

Technology Management

• Move start back by three months due to difficulty of recruiting leadership position

Pricing / Valuation

 Move start back by nine months; Reduced priority of initiative to enable increased priority for Private Assets IBOR & Accounting project

Data Services (Governance)

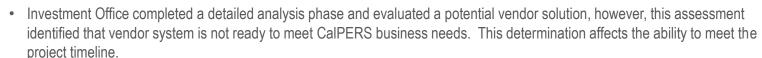
 Move start back by six months; Reduced priority of initiative to enable increased priority for Private Assets IBOR & Accounting project



Significant Status or Sequence Changes Since Last Report (cont.):

Explanation of Projects in Red Status

PM² Public Markets Portfolio Management



• The focus now is to evaluate alternative ways to meet the objectives of the project, including the consideration of expanding the use of existing systems already utilized within the Investment Office

Finance / Expense Management

- Completed analysis with KPMG to assess issues regarding expense management. Issues are more significant and not easily resolved, including the need to:
 - Re-engineer expense payment and processes;
 - Ensure all expense payments are coded in a way that facilitates financial reports in multiple dimensions;
 - Identify and implement a technology solution to effectively track investment expenses
- Have not obtained approval to recruit investment officer position to lead financial reporting and reengineering effort.

Major Accomplishments Since Last Update:

Target Operating Model Initiatives Custody, Fund Accounting & Performance ✓ Completed Master Custodian Contract ✓ Defined and Implemented T+1 Daily Hard Close Process ✓ Implemented CERBT Recordkeeping ✓ Completed Transition to Master Custodian's New Enhanced Service Model Administrative Policies & Monitoring ✓ Finalized INVO Travel Policies and Procedures ✓ Conducted Travel Policy Staff Training (95% of staff completed training) ✓ Implemented Interim Travel Policy Compliance Review Process ✓ Revamped Internal Audit Coordination Process & Roles Manager Selection & Monitoring ✓ Further enhanced the Investment Proposal Tracking System (IPTS) by implementing common status definitions and communication templates ✓ Produced September 2011 Investment Proposal Activity Reports using IPTS Operating Risk Governance & Management ✓ Completed Rapid Results Project: Operating Event Measurement and Escalation Investment Policy Development & Monitoring ✓ Developed and Implemented ISDA Terms and Service Approval Process Performance Attribution & Analysis ✓ Completed Rapid Results Project: Consolidate INVO Board Reporting ✓ Completed Rapid Results Project: CIO Reporting Contract and Vendor Management ✓ Developed reports to better monitor and manage contract and Letter of Engagement expirations, and plan for renewals



Key Deliverables Over the Next 6 Months:

| Target Operating Model Initiatives |
|---|
| Public Markets Portfolio Management (PM2) |
| ☐ Complete Analysis of Equity Order Management System for Portfolio Construction and Solution for Global Equity IBOR |
| Custody, Fund Accounting & Performance |
| ☐ Integrate Service Level Agreements into Master Custodian Contract |
| ☐ Implement Governance Model |
| Investment Risk Management |
| ☐ Complete Testing and Go Live with New Risk Management System (BarraOne) |
| Administrative Policies & Monitoring |
| ☐ Launch Delegated Authority Review and Review of Role of General Pension Consultant |
| ☐ Initiate 3 new Rapid Results Projects (Operational Delegation, Board Agenda Schedule, Standard Contract Terms and Conditions) |
| Manager Selection & Monitoring |
| ☐ Charter Rapid Results Team to Develop Manager Monitoring and Selection Standards Across Asset Classes |
| Finance / Expense Management |
| ☐ Launch Financial Reporting and Expense Process Reengineering Projects |
| Operating Risk Governance & Management |
| ☐ Implement Operating Event Escalation Process |
| Fund Structure & Fund Expenses |
| ☐ Develop plan for implementing Group Trust Structure; Segregate assets that cannot be pooled in a group trust. |
| Pricing / Valuation |
| ☐ Issue Valuation Management Services RFP for Real Assets Appraisal Program |
| Technology Management |
| ☐ Complete review and refresh of INVO Disaster Recovery and Business Continuity Plan |

